

***Space Environment Testbed Pre-NRA Workshop
Goddard Space Flight Center
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The Living with a Star Program SET/Carrier Development

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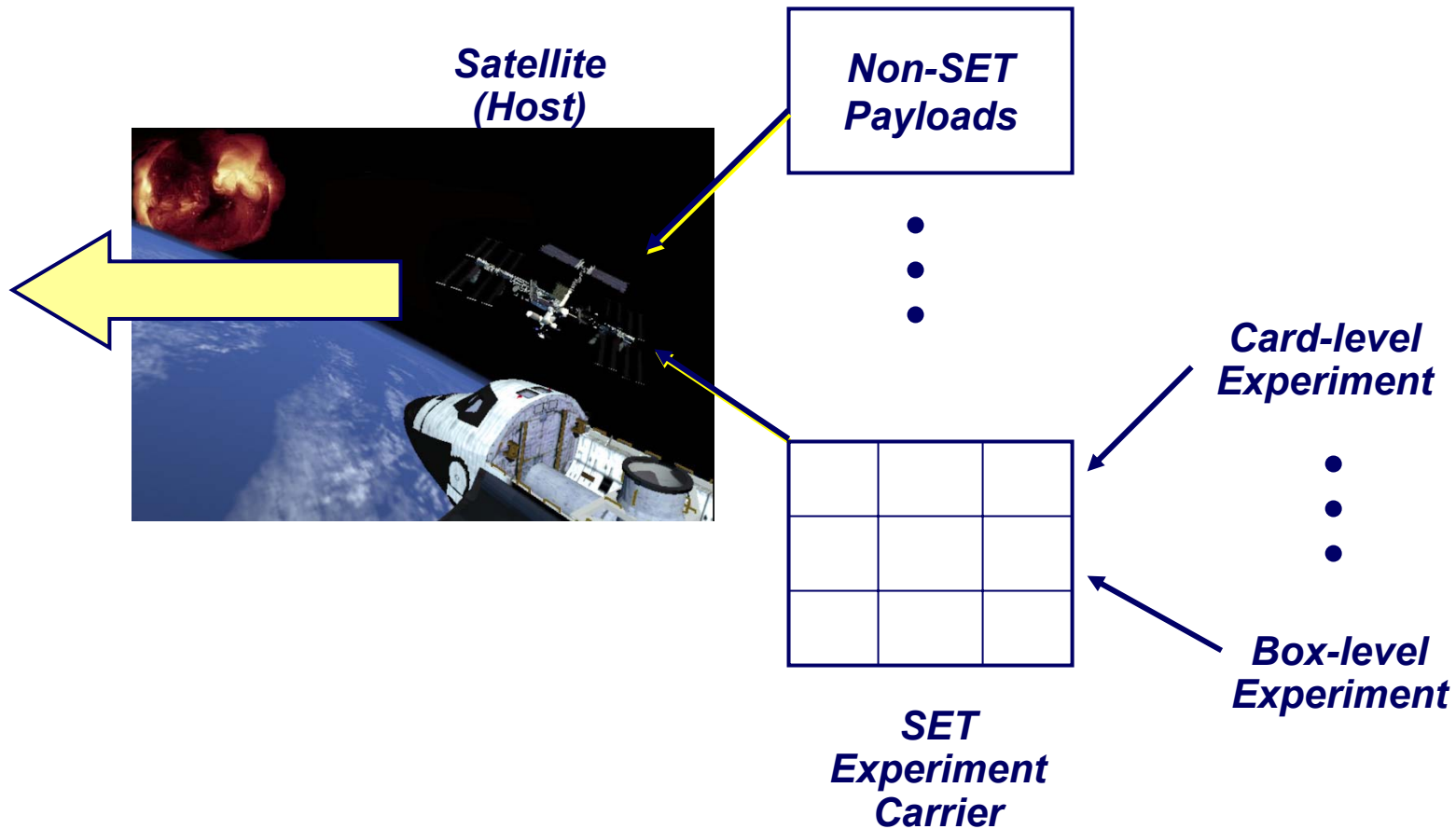
THE SUN EARTH CONNECTION



SET Carrier - Where it fits

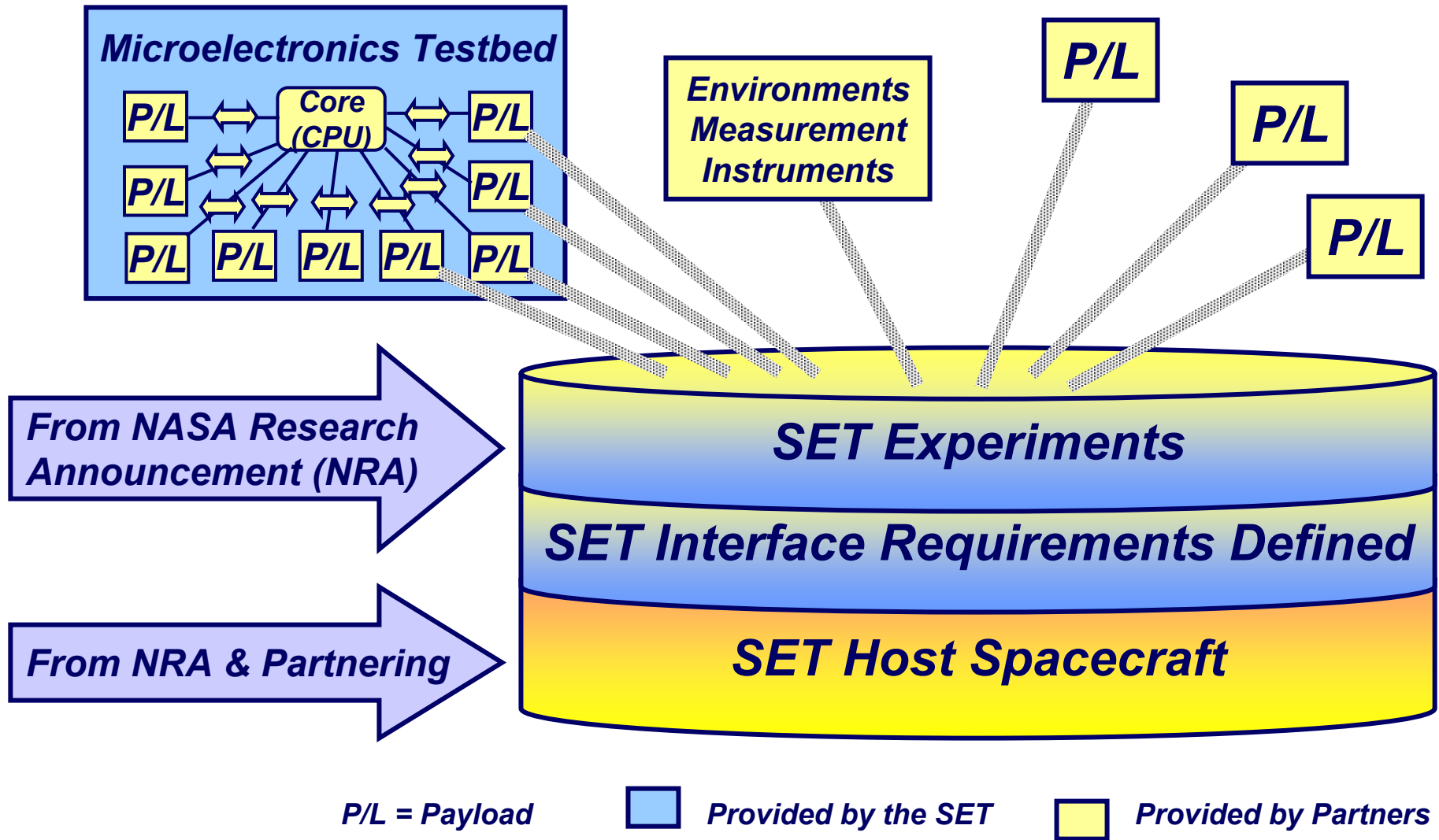


Launch Vehicle





Space Environments Testbed (SET) Interface Requirements Concept





SET Carrier Requirements Deviation

- ***Host Requirements and Capabilities***

- ***Carrier configuration and capabilities***

- ***Power***
 - ***Weight***
 - ***Volume***
 - ***Telemetry, etc.***

- ***Experiment Requirements***

- ***Carrier Functionality***

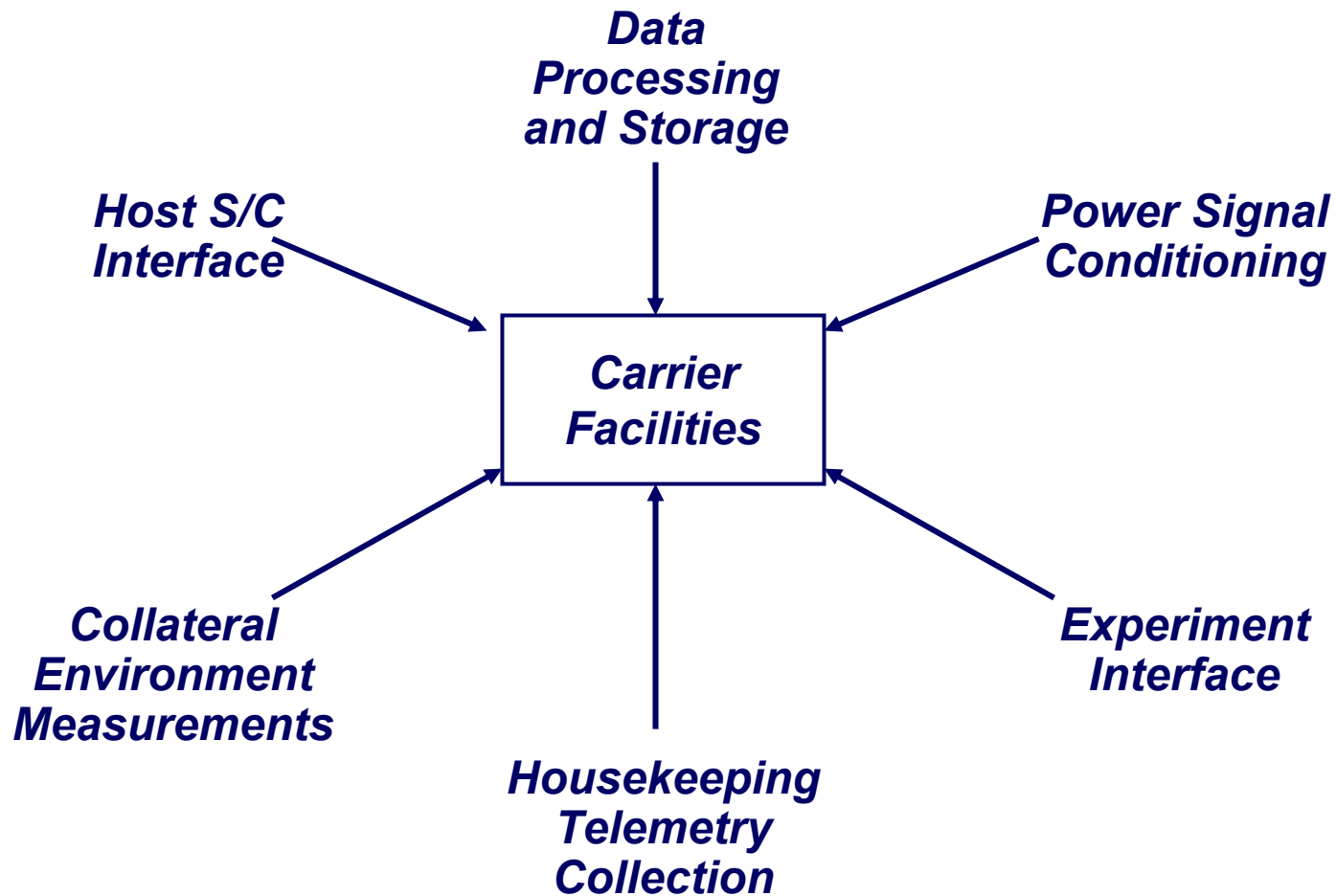
- ***Standard mechanical configuration***
 - ***Standard electrical/power interface***
 - ***Standard collateral environment measurement (tailored for technology/orbit)***

- ***Modularity is key (able to accommodate many host configurations)***

- ***Minimize invasiveness to spacecraft***



SET Carrier Facilities





SET Interface Concepts - Experiments

Goal: Provide a modular/re-configurable carrier capable of supporting both card-level and box-level experiments

Facilities:

- Housekeeping and engineering/science data collection via a TBD standard interface (analog/digital)***
- Commanding via a TBD Standard interface***
 - Stored, environment-induced, etc.***
- Regulated power to experiments***
- Standard mechanical form factor***
 - TBD card size***
 - Boxes are negotiable***

This workshop helps define the strawman concept



SET Carrier - Path to Success

